MR975198 (90a:35079) 35J40 (35B40)
Maz′ja, Vladimir Gilelevič [Maz′ya, Vladimir G.]; **Rossmann, Jürgen** (DDR-WPU)
Über die Asymptotik der Lösungen elliptischer Randwertaufgaben in der Umgebung von Kanten. (German) [On the asymptotics of solutions of elliptic boundary value problems in the neighborhood of edges]
Math. Nachr. **138** (1988), 27–53.

Summary: "The topic is the behaviour of the solutions of elliptic boundary value problems in the neighborhood of edges. Here, the solution and the right-hand sides are assumed to be functions from suitable weighted Sobolev spaces. Under certain assumptions on the boundary values and on the right-hand sides we show that the solution u differs by some 'singular terms' from a 'regular' one. Moreover an exact characterization of the coefficients of the asymptotics is given. In contrast to previous papers there is no additional assumption about the smoothness of the right-hand sides in the direction of the edge."

Reviewed by *Jean Leray*